



**TECHNOLOGY DRIVEN. WARFIGHTER FOCUSED.**

# Requirements Management

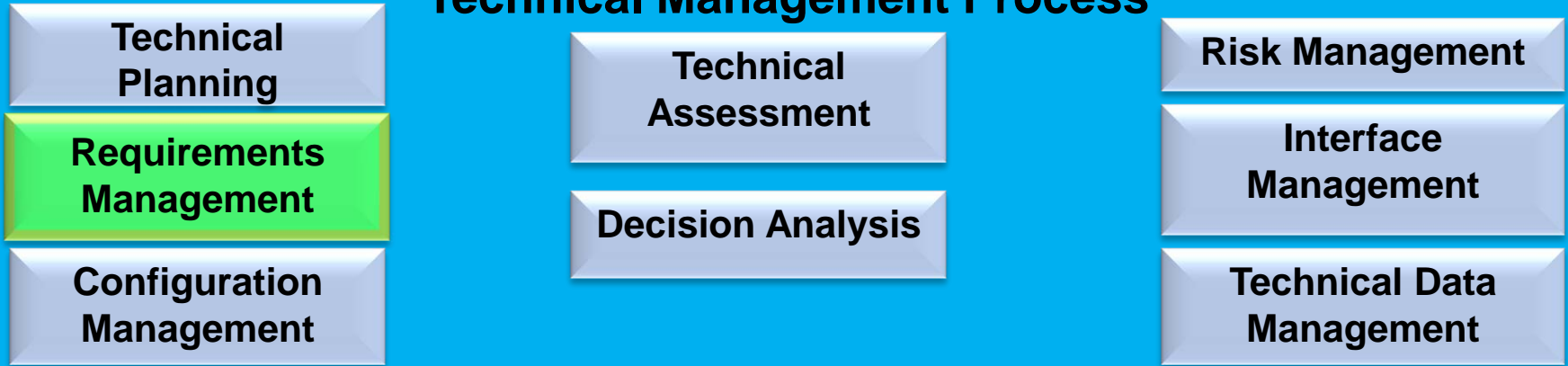
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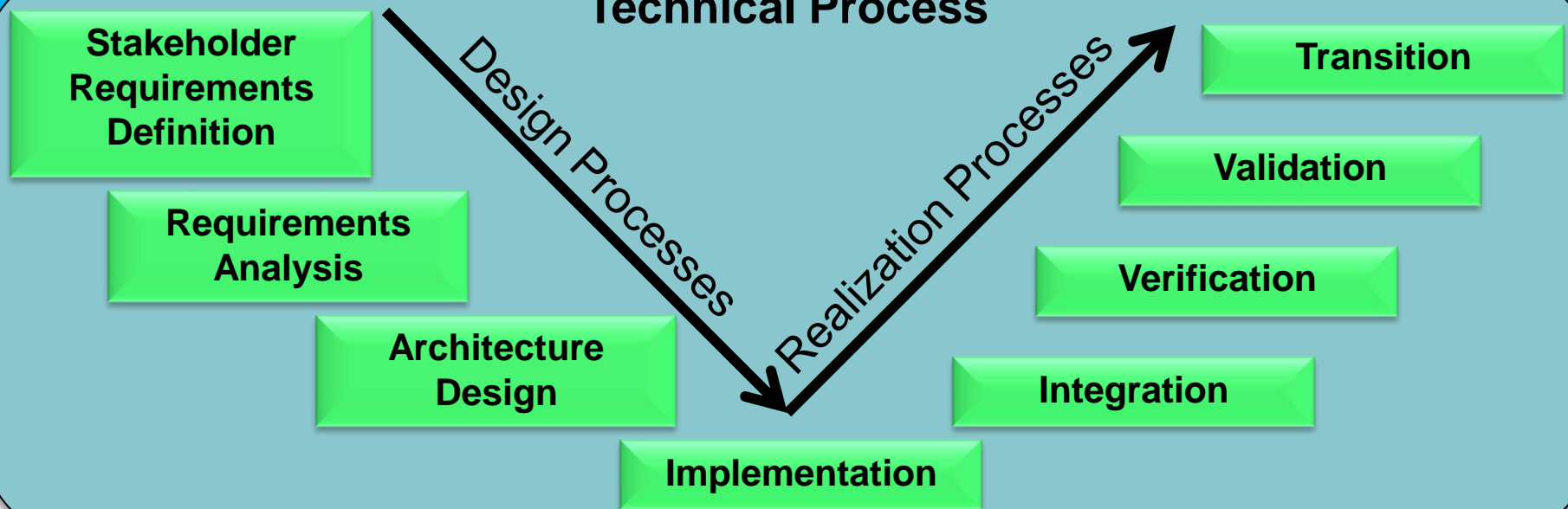
- **What is Requirements Management?**
  - A collection of activities undertaken by many people on a project in order to gather, document, store, analyze, track, and implement requirements, while controlling change and communicating with stakeholders.
  
- **Why do we need Requirements Management?**
  - People involved on the project are:
    - Continually kept apprised of requirement status
    - Understand the impact of changing requirements specifically, to schedules, functionality, and costs.

- Ensures that the voice of the customer is heard throughout the entire development process
- Not restricted to a single phase in the lifecycle
- Key task is traceability of the requirements
- Different techniques, approaches and tools may be used
- Success depends on the commitment of the whole project team

## Technical Management Process



## Technical Process



## Requirements Define:

- What the users want to achieve.
- What the system must do to satisfy user needs.
- What each component must do, and how components will interact.

## Requirements:

- Have only one “shall” statement
- Have only one action verb
- Do not have stacked (multiple) “shall” statements in a list

- **Unambiguous** - The reader of a requirement statement should be able to draw only one interpretation of it.
- **Verifiable** – There is a value or test to measure the requirement against to insure the intent of the requirement is being met. The verification methods can be an inspection, demonstration, analysis, or a test to determine whether each requirement is properly implemented in the product.
- **Traceable** - You should be able to link each requirement to its source, which could be a higher-level system requirement, a use case, or a voice-of-the-customer statement

- **Correct** - Must accurately describe the functionality to be delivered.
- **Feasible** - Must be possible to implement each requirement within the known capabilities and limitations of the system and its environment.
- **Necessary** - Should document something the customers really need or something that is required for conformance to an external requirement, an external interface, or a standard.



- **DOORS (Dynamic Object-Oriented Requirements System)**
  - Made for Requirements Management
  - Traceability (requirement, derived requirements, decisions, test reports, etc.)
  - Allocations
  - History/Change Management
  - Baselining
  - Access Control
  - Single Access Point for Requirements
  - Able to Export/Import Information into Other Formats



# DOORS Training Modules



**LCMC managers –  
indirect consumers of  
DOORS data**

**Direct consumers of  
DOORS data**

**Data owners and  
authors**

**Power users, administrators,  
project jump-start teams**

**Leveraging DOORS**  
2 hour - concepts only

**Intro to DOORS**  
2 hour hands-on + homework

**DOORS Basic User Training**  
2 hour hands-on + homework

**Traceability Links**  
2 hour hands-on + homework

**Importing Information into DOORS**  
4 hour hands-on + homework

**Managing DOORS Projects**  
4 hour hands-on + homework

**Decision Management in DOORS**  
4 hour hands-on + homework

**DOORS Extension Language (DXL)**  
4 hour hands-on + homework

DOORS training is available through TARDEC SEG. Contact any SEG group member for more information.

- In any house if the foundation isn't sound it can cost more money and time to fix what should have been done when it was built. In our case the house is a program and the foundation is made out of good requirements.

